Memo

Quality Control

Work Order January-07-14 3:02			*11(	760*							Page 1 .
Item ID: D3 Revision ID:	499-2		Accept	*N900	040	100	)*	Setup St			S1*
Item Name: Mo	unting Plate							St	top 🗲	۱N،	<b>32</b> *
Start Date: 1/0	7/14 <b>Start Qty:</b> 4.00	*4*		Cust Item	ID:						
Required Date: 1/0 Reference:	7/14 <b>Req'd Qty:</b> 4.00	*4*		Customer:				- 0			
Approvals: Pr	rocess Plan: ムレブ	Date: 14-01-05	Tooling:	D	ate:	_	]			۱N،	<b>⊋</b> 1*
	C:		<b>SPC (Y/N):</b>	D	ate:			St	top 🛪	۱N <sup>۱</sup>	₹2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty		ect nber	Insp. Stamp
Draw Nbr	Revision Nbr		2		-						
D3499	Rev C										
*100*	FLOW WATER JET		0.00				4	0			DAS 23 9-89 14-08-
Waterjet	Memo		0.00								
FLOW CNC Waterjet	1-Cut as po Dwg Rev: Prog Rev: 2-Deburr i	C									
*110 *11 <b>0</b> *	QC2- Inspect parts off	machine FAI/FAIB	0.00				ц	Ó			DAS 23 9-89 14-08-
QC Quality Control	Memo		0.00	·							
120 *1.00*	QC8- Inspect parts - se	cond check	0.00				(4)			•	DAS 38 14/66/67

0.00

DQA:			Date:										DART
						WORK ORDER NON	-CC	ONFO	RMANCE / U			_	AEROSPACE
QA Closed:			Date:							V	Vork Order	update only	
Work Ord	er:					DISPOSITION				AGAINST D	EPARTMEN	T/PROCESS	
	•				<del></del>	Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering
Part i	No.					Scrap			Machining	Small Fab	] Р	rod. Eng. Coor.	Quality
	,					Use-as-is		Thern	noforming	Finishing	Rec/Si	ore/Packaging	Other
NCR I	No.					Suspected Unapproved	]		Large Fab	Composite		Supplier	
Root					Desc	ription of work order update		Initial	Ac	ction	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	n QC Inspector
Design								i					
Doc/Data													
Equip/Tooling													
Handling/Pre													
Material													
Operator													
Offset/Setup	<u> </u>										İ		
Process													
Supplier													
Training												·	
Transport	<u> </u>												
Unapproved							<u> </u>		L				
							FA	ULT CAT	TEGORY				
Landi					_	General		1		Г	<b>–</b>		·
	<u> </u>	Bending			<u> </u>	Bend		-	Program	-	Outside D		Pressure/Forced
	<u> </u>	Centre No	ot Concer	ntric	$\perp$	BOM/Route	$\vdash$	Grain		ļ		er tolerance	Set-up
		Cracks				Broken/Damage/Defect	<u> </u>	Hardwa			Part Incor		Temperature/Cure
	<u> </u>	Crimp/Kir	nk/Ripple	/Wave	_	Burrs		<b>1</b> `	ion Incomplete/U		Part Lost/	_	Weld
	<del></del>	Cuffs				Contamination		→	tions Incomplete		Part Move		Wrong Stock Pulled
	<u></u>	Crushing			<u> </u>	Countersink	<u></u>	┥ ¯	gned/off center	<u> </u>	Positione	· ·	<b>п</b>
	<u> </u>	Heat Trea			<u> </u>	Cut Too Short		Mislabe		L	Power Los	ss/Surge	Other
	<u> </u>	Inspection	•	Tube	<u> </u>	Drawing	_	Misread					<del></del>
		Marks/Ch			<u> </u>	Drill Holes	<u></u>	Off-set					
	$\vdash$	Turning S			<u> </u>	Finish		-	Calibration				
		Wave/Tw	ist in Tub	oe		Fit/Function	L	Out of 9	Sequence				

Work Orde		760		*110	760*						Page 2
Item ID: Revision ID: Item Name:	D3499-2  Mounting Plate	e		Accept	*N90004	<b>010</b>	\ <b>0</b> *	Setup	Start Stop	1 71	S1* S2*
Start Date: Required Date: Reference:	1/07/14 1/07/14	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item ID: Customer:						
Approvals:		n:		_ Tooling: _ _ SPC (Y/N):	Date:	alt ville ve	_	Run	Start Stop		R1* R2*
Sequence ID/ Work Center II 130 *120* Small Fab	D	Operation Description Small Fab Memo		Set Up/ Run Hours 0.00	3	# Plan Code AS 30 -89		t Re Qt	y I	Reject Number	Insp. Stamp
140  *140* Brake NC Brake NC		Deburt if ne  NC BRAKE  Memo  Bend as per	Dwg D3499	0.00	3	AS 90 89	Ц				(4/09/
150 *150*		QC5- Inspect part compl	eteness to step on W/O	0.00			4				DAS 38 9-89 /Y-9-7
QC		Memo		0.00			•				

Memo

Quality Control

DQA:			Date:											•	DART
			<b>.</b> .			WORK ORDER NON	-CC	ONFOR	RMANCE / U			O I	. d	_	AEROSPACE
QA Closed:		<u> </u>	Date:		1				· · · · · · · · · · · · · · · · · · ·		νo	rk Order up	date only		
Work Orde	er:					DISPOSITION		:		AGAINST [	EF	PARTMENT	/PROCESS		
	•					Rework			Skid-tube	Crosstube			Water Jet		Engineering
Part N	lo.					Scrap		ı	Machining	Small Fab	╗	Pro	d. Eng. Coor.		Quality
	•				_	Use-as-is		Thern	noforming	Finishing		Rec/Stor	e/Packaging		Other
NCR 1	۱o.	<del></del>				Suspected Unapproved			Large Fab	Composite			Supplier		
Root					Desci	ription of work order update	ı	nitial	Ac	tion		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription	$\bot$	Date	Verification	1	QC Inspector
Design															
Doc/Data											ļ				
Equip/Tooling			:								ı				
Handling/Pre											.				
Material															
Operator															
Offset/Setup							1								
Process .							ĺ								
Supplier															
Training							1		i						
Transport							Ì								
Unapproved						· · · · · · · · · · · · · · · · · · ·	EAI	III T CAT	TEGORY	· · · · · · · · · · · · · · · · · · ·			<u> </u>	_	
Landi	na (					General	10	OLI CA	LOOKI				-		<del></del>
Landi	, e	Bending				Bend		Folio/P	rogram	Г		Outside Dim	ensions [		Pressure/Forced
i.		Centre No	ot Concer	ntric	$\vdash$	BOM/Route	_	Grain	Togram	ŀ	-	Over/Under	F		Set-up
	<del> </del>	Cracks	or comeci		┢	Broken/Damage/Defect	$\vdash$	Hardwa	are	ļ	-	Part Incorre	F		Temperature/Cure
	$\vdash$	Crimp/Kir	nk/Rinnle	/Wave	<del></del>	Burrs		1	ion Incomplete/U	Inqualified	-	Part Lost/Mi	h		Weld
		Cuffs		,		Contamination	$\vdash$	1	tions Incomplete/	·	~	Part Moved			Wrong Stock Pulled
	-	Crushing			<b>—</b>	Countersink	-	4	gned/off center	- I	$\dashv$	Positioned V			
	<u> </u>	Heat Trea	ıt		·	Cut Too Short	$\vdash$	Mislabe	=	ľ		Power Loss/			Other
	厂	Inspection		Tube		Drawing	$\vdash$	Misread		L		'	- (		
		Marks/Ch	-			Drill Holes		Off-set			•				
		Turning S				Finish		-	Calibration		•		<del></del>		<del></del>
		Wave/Tw	•			Fit/Function		Out of	Sequence						

Work Orde January-07-14		0760		*110	760*						Page 3
Item ID: Revision ID: Item Name:	D3499-2  Mounting Plat	e		Accept	*N900	<b>040</b>	100	)*	Setup Star		S1* S2*
Start Date: Required Date: Reference:	1/07/14 1/07/14	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:					. 17
Approvals:	Process Pla	n:	Date:	Tooling: SPC (Y/N):	-	ate:		]	Run Stai Stoj	<b>/IV</b>	R1* R2*
Sequence ID/ Work Center II 160 *1 60* HandFinish Hand Finishing	)	Operation Description Chemical Conversion Conversion Memo	it per QSI005 4.1	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 <b>*170*</b> Powdercoat Powder Coating		White Gloss(Ref:4.3,5.1)  Memo START TIM OVEN TEM FINISH TIM	59, 3: 20 Perature: <u>32</u>	0.00				H	Ø	121- 9 <sub>1</sub>	<b>7</b> 7 8 8

180

\*1 20\*

QC3- Inspect Part Finish

Memo

0.00

0.00

Quality Control

4 & @ 14/09/16

DQA:			Date:				_						7	DART
QA Closed:			Date:			WORK ORDER NON	-CC	ONFO	RMANCE / U		ork Order up	date only	$\neg$	AEROSPACE
QA Closed.			Date.											
Work Ord	er:					DISPOSITION				AGAINST D	EPARTMENT,	PROCESS		
,	••••					Rework	1		Skid-tube	Crosstube	7	Water Jet	E	ngineering
Part I	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.		Quality
:						Use-as-is	1	Thern	moforming	Finishing	Rec/Stor	e/Packaging		Other
NCR I	Vo.					Suspected Unapproved	1		Large Fab	Composite		Supplier		
Root					Desc	ription of work order update	1	nitial		ction	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Des	cription	Date	Verification	1	QC Inspector
Design														
Doc/Data						•							e	
Equip/Tooling														
Handling/Pre	<u> </u>								ļ					
Material			1											
Operator														
Offset/Setup	<u> </u>											:		
Process	$\vdash$													
Supplier	_													
Training	<del> </del>		1											
Transport	<u> </u>		ļ			•			·					
Unapproved		_	<u> </u>	<u> </u>		* 14I	FAI	III T CAT	<u> </u> TEGORY	-	1			
Landi	na (		·			General	FA	ULI CA	IEGORT	·	<del></del>			
Landi	LIR (	Bending				Bend	Г	احمانه/د	Program	Г	Outside Dim	ensions [	Pro	essure/Forced
	┝	Centre No	at Cancer	ntric	-	BOM/Route	$\vdash$	Grain	Togram	<u> -</u> -	Over/Under			t-up
,	$\vdash$	Cracks	or concer	ittic	-	Broken/Damage/Defect	-	Hardwa	aro	F	Part Incorred	1		mperature/Cure
	H	Crimp/Kir	nk/Rinnlá	/Mave	$\vdash$	Burrs	$\vdash$	4	ion Incomplete/U	Inqualified	Part Lost/Mi	t t	$\dashv_{w_i}$	·
	H	Cuffs	путпрріє	, wave		Contamination	<b> </b>	i i	tions Incomplete	· ·	Part Moved			rong Stock Pulled
		Crushing				Countersink		4	gned/off center		Positioned V			
,	$\vdash$	Heat Trea	nt		-	Cut Too Short		Mislabe	-	-	Power Loss/	· · · · · ·	$\neg_{ot}$	her
]		Inspectio		Tube		Drawing		Misrea		<u> </u>		i i		
	$\vdash$	Marks/Ch				Drill Holes		Off-set						T
		Turning S				Finish		4	Calibration		····			
	Г	Wave/Tw	•			Fit/Function		4	Sequence					···

Work Ord January-07-14				*110	760*							Page 4
Item ID: Revision ID: Item Name:	D3499-2 Mounting			Accept	*N900	<b>040</b>	100	)*	Setup	Start Stop	171	S1* S2*
Start Date: Required Date Reference:	1/07/14 e: 1/07/14	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*	·	Cust Item II Customer:	D:				g, ,		
Approvals:	Process QC:	Plan:	Date:	Tooling: SPC (Y/N):		te: te:			Run	Start Stop	^1 <i>V</i> 1	R1* R2*
Sequence ID/ Work Center 190 *1 QA* Packaging	ID	Operation Description Identify as per dwg & St	ock Location:	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Qt	y	Reject Number	-
Packaging 200		OC21- Final Inspection	. Work Order Release	0.00							(	l. 10

0.00

Memo

\*200\*

Quality Control

JJ14.9.16

DQA:			Date:											DART
OA Character			Data			WORK ORDER NON	-CC	ONFO	RMANCE / L		Vorte Ordon II	ndata anlız - [	_	AEROSPACE
QA Closed:			Date:							v	Vork Order u	puate only		
Work Ord	er:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
	•	•				Rework	1		Skid-tube	Crosstube	7	Water Jet	$\neg$	Engineering
Part I	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	_	Quality
	•					Use-as-is	1 1		noforming	Finishing		re/Packaging	ヿ	Other
NCR I	No.					Suspected Unapproved	1		Large Fab	Composite		Supplier		
	•						1				<del></del>	·-		
Root					Desc	ription of work order update	1	Initial	Ad	ction	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	<u>\</u>	QC Inspector
Design														
Doc/Data	Щ													
Equip/Tooling														
Handling/Pre	_		1											
Material	Щ													
Operator							1							
Offset/Setup	Ш													
Process									į					
Supplier	_													
Training	$\vdash$													
Transport Unapproved	H												1	
Ollapproved	<u></u>		<u>.                                    </u>	L	L	· ··	FΔ	LILT CAT	I TEGORY		1	l		
Landi	ng (	Gear				General		<u> </u>	120011		· · · · · · · · · · · · · · · · · · ·			<del>-</del>
		Bending				Bend		Teolio/P	rogram	Γ	Outside Din	nensions	$\Box_{P}$	ressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain		<u> </u>	Over/Unde		_	et-up
		Cracks				Broken/Damage/Defect		Hardwa	ire	ļ	Part Incorre	t t	Т	emperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		4	ion Incomplete/l	Unqualified	Part Lost/M	lissing	∏ν	Veld
	-	Cuffs	- • •			Contamination		<b>-</b> 1 '	tions Incomplete		Part Moved		v	Vrong Stock Pulled
		Crushing				Countersink		-	ned/off center		Positioned			
		Heat Trea	at			Cut Too Short		Mislabe	eled		Power Loss	/Surge	c	Other
		Inspectio	n Strip in	Tube		Drawing		Misread	d	_				
		Marks/Ch	natter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of 0	Calibration					
		Wave/Tw	ist in Tub	oe		Fit/Function		Out of S	Sequence					

## **Picklist Print**

January-07-14 3:02:47 PM

Work Order ID:

110760

Parent Item:

D3499-2

Parent Item Name:

Mounting Plate

**Start Date:** 1/07/14

Required Date: 1/07/14

Start Qty: 4.00

Required Qty: 4.00

**Comments:** 

IPP Rev: A New Issue 06-05-05 JLM

IPP Rev:B As per Rev B 06-08-31 JLM

bv:EC

IPP Rev:C as per dwg revC DD 10.02.23 verified

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued DAS	Status
<b>M6061T6S.125</b> 6061-T6 .125 Sheet		Purchased	No			100	sf	201.7900	1.068	.4.496842	4.5	<b>23</b> 9-89	14-08-7

<u>Location</u>	Loc Qty	Loc Code	
MAT021	201.79		***
m127272	39.5		
m127454	130.29		
m127501	32		127501

Page 1

DQA:			Date:											•	<b>DAPT</b>
						WORK ORDER NON	-CC	ONFO	RMANCE / L				_		AEROSPACE
QA Closed:		-	Date:							\	Work	Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST [	DEPA	RTMENT	/PROCESS		
Part N	ا ا					Rework Scrap Use-as-is Suspected Unapproved		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite			Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Quality Other
Root					Desci	ription of work order update		nitial	A	ction		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Des	cription		Date	Verification	า	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved															
							FAI	ULT CAT	TEGORY	<u> </u>					
Landi		1		<u></u>		General									
		Bending Centre No	ot Concen	ntric		Bend BOM/Route	-	Folio/P Grain	rogram			utside Dim ver/Under			Pressure/Forced Set-up
		Cracks				Broken/Damage/Defect		Hardwa	re		Pa	art Incorrec	cí [		Temperature/Cure
		Crimp/Kir	nk/Ripple,	/Wave		Burrs		Inspecti	ion Incomplete/I	Unqualified	Pa	art Lost/Mi	ssing		Weld
		Cuffs				Contamination		Instruct	ions Incomplete	/Unclear	Pa	art Moved			Wrong Stock Pulled
		Crushing				Countersink		Misalig	ned/off center	r [	Po	ositioned V			
		Heat Trea	it			Cut Too Short		Mislabe	eled		Po	ower Loss/	Surge		Other
		Inspection	n Strip in	Tube		Drawing		Misread	d .	_					
		Marks/Ch	atter			Drill Holes		Off-set							
		Turning S	equence			Finish		Out of 0	Calibration						
		Wave/Tw	ist in Tub	e		Fit/Function		Out of S	Sequence						

DART AEROSPACE LTD	Work Order:	110760
Description: Mounting Plate	Part Number:	D3499-2
Inspection Dwg: D3499 Rev: C		Page 1 of 1

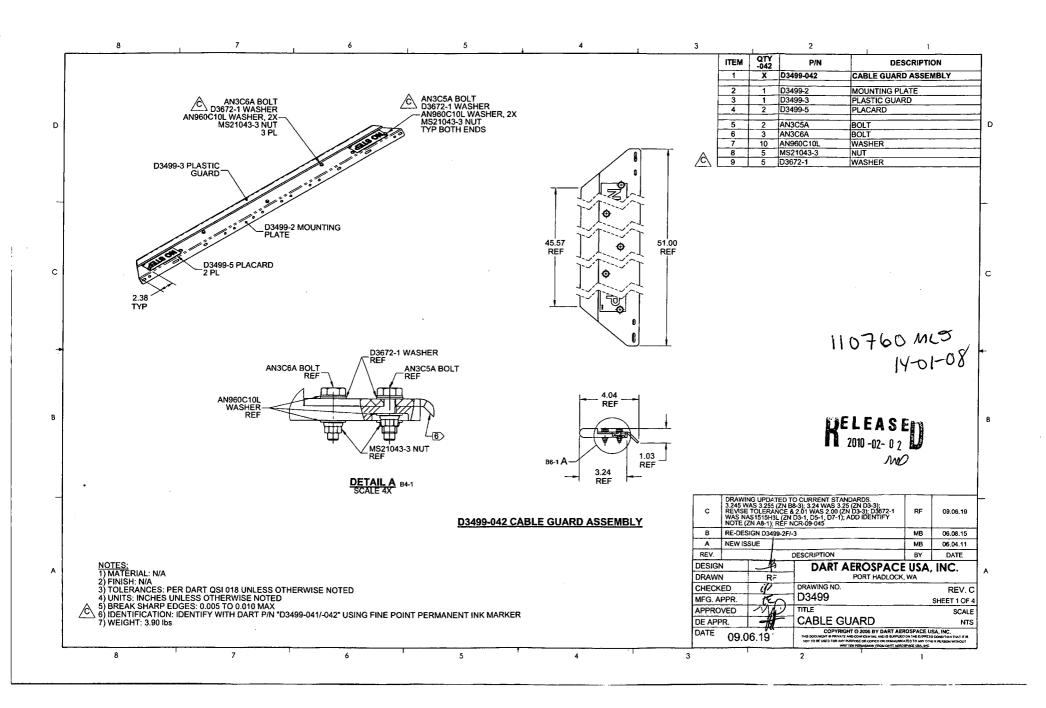
## FIRST ARTICLE INSPECTION CHECKLIST

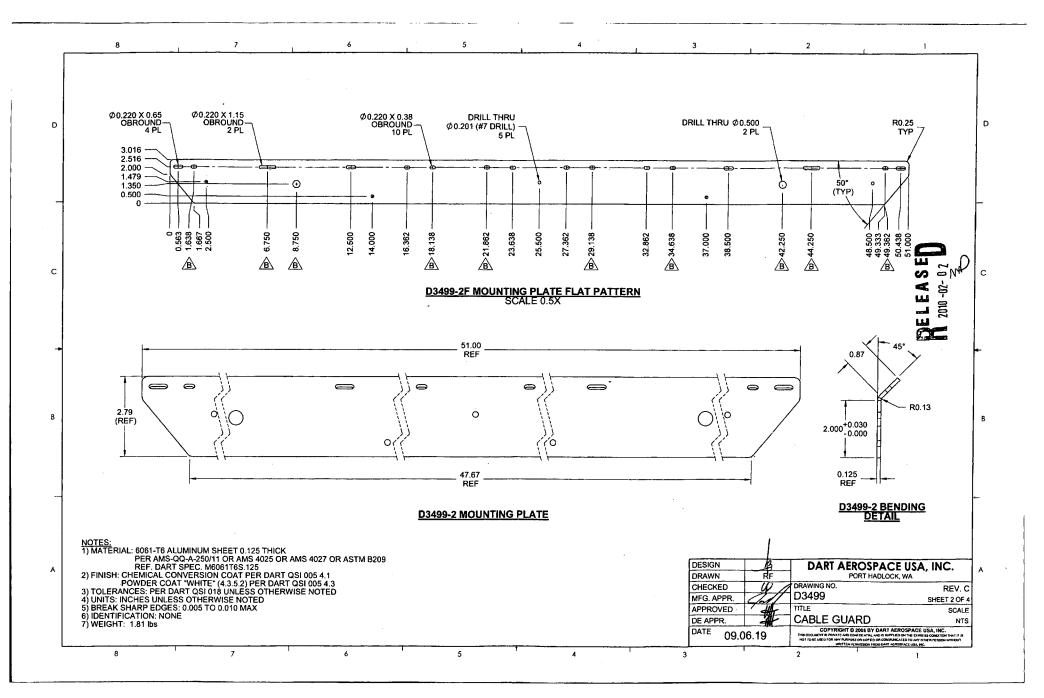
Drawing	Tolerance	Actual	Accept	Reject	Method of	Comments	
Dimension		Dimension			Inspection		
51.000	+/-0.010	51.000			一	JKMO7	
47.67	+/-0.030	47-67	_		Т		
Ø0.201	+0.005/-0.001	0.202"	_		V	Jkm01	
25.500	+/-0.010	25.500'-	_		$\tau$		
Ø0.220 x 0.38	+/-0.030	0.333760.354	-		V		
2.500	+/-0.010	2.503"	_		V		
3.016	+/-0.010	3.018"	~		V		
0.500	+/-0.010	0.504"	-		V		
R0.25	+/-0.010	0.25	_		RG		
Ø0.500	+0.006/-0.001	0.500	(	-	V		
0.125	+/-0.010	0.125			V		
				-			
			DAS				

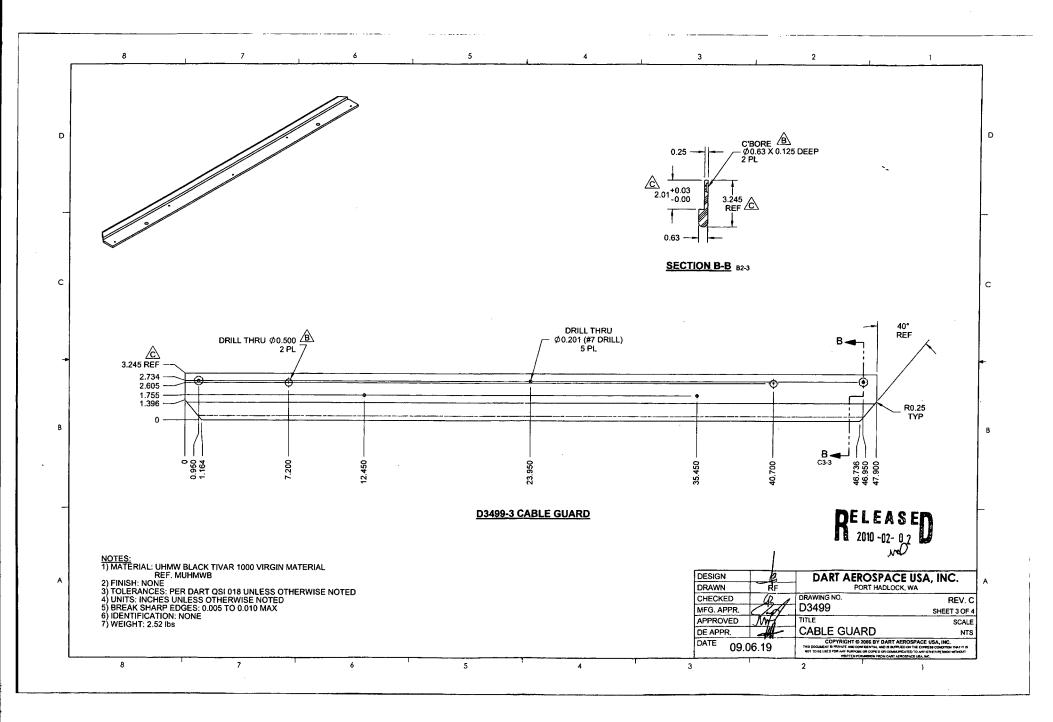
DAS
38

Measured by: 23
9-89
Date: パイーパーナ Date: パイーターア Date:

Rev Date		Change	Revised by	Approved
Α	06.06.22	New Issue	KJ/JLM	
В	06.08.31	Dimensions updated per D3499 Rev. B	KJ/JLM	
С	09.05.04	Dimensions updated	KJ/DD IV	
D	13.06.03	Dimensions updated per Dwg Rev. C	KJ/JLM O	12







6.00 FONT: ARIAL BOLD RED -TEXT HEIGHT: 0.88" TEXT WIDTH: 5.17" 0.43 NO STEP 1.75 0.44

FONT: ARIAL BOLD RED -TEXT HEIGHT: 0.06" TEXT WIDTH: 0.32" D3499-5 0.13

2

DETAIL C B5-4

D3499-5 PLACARD

NOTES:

1) MATERIAL: RED LETTERS ON WHITE ADHESIVE BACK VINYL
MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP OR
AVERY IPM #2031. SIZE IS 6.00° LONG° x 1.75° WIDE

8

D

С

2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: N/A

DESIGN DART AEROSPACE USA, INC. DRAWN PORT HADLOCK, WA DRAWING NO. CHECKED REV. C D3499 MFG. APPR. SHEET 4 OF 4 APPROVED TITLE SCALE CABLE GUARD DE APPR. COPYRIGHT © 2006 BY DART AEROSPACE USA, INC.
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